



Economic sanctions against South Africa

3 South Africa: The impact of sanctions on Southern African economies

R.H.Green

South Africa:
The Impact of Sanctions
on Southern African Economies

Reginald Herbold Green

©

International University Exchange Fund
48 route des Acacias
1227 — Geneva

1980

CONTENTS

Preface	5
1. Introduction	5
1.1 Methodology	
2. Elements of Present Economic Dependence in the Region	7
3. Recent Alterations in Dependence Patterns	10
4. The Initial Impact of Sanctions	11
5. Regional and National Adjustments to Sanctions	14
5.1. Regional Aspects	
5.2 Regional Mechanisms	
5.3 National Economic Policy Adjustments	
5.4 Zimbabwe and Namibia: Special Considerations	
6. Potential International Contributions to Sanctions Adjustment	22
7. Sanctions Exemptions and Limitations on Coverage	26
8. Potential Adjusted Positions	28
9. Conclusion	30

Note about the Author

REGINALD H. GREEN, Professorial Fellow of the Institute of Development Studies at the University of Sussex, is widely acknowledged as a leading authority on development issues affecting sub-Saharan African economies and has published extensively on international development issues. With over 100 professional publications to his credit, in journals produced in all continents of the globe, Professor Green has acted as a consultant economist for the International Labour Office, the United Nations Conference on Trade and Development, the United Nations Institute for Namibia, the Southern African Development Co-ordination Committee (London), the World Council of Churches, the Commonwealth Secretariat, the International Foundation for Development Alternatives, the Catholic Institute for International Relations (London), and various international donor agencies. He has also been an economic advisor to the Tanzanian Government (1966-1974), the South West Africa People's Organisation, Front Line States and various other African governments during the course of the last 15 years. In 1964, Professor Green was a participant at the International Conference on Sanctions Against South Africa (London).

The Series

ECONOMIC SANCTIONS AGAINST SOUTH AFRICA is a collection of research studies directed at evaluating the case and prospects for an international policy of economic sanctions, designed to eliminate *apartheid*. It addresses various facets of this question — the origins, nature and character of sanctions applied or proposed, measures which could still be employed at the international and national levels, choices between options, the constraints which might potentially arise in sanctions application, the implications and impact of various forms of sanctions on South Africa and neighbouring economies, possible offsetting contingency arrangements that could be organised to assist affected countries, and various positive consequences that might be anticipated from the comprehensive application of co-ordinated and multilateral sanctions policy. The studies were undertaken over the period June 1979 to April 1980 and were supported financially from contributions made by the Swedish International Development Authority (SIDA), as well as in other ways by non-governmental organisations in Europe and elsewhere, in addition to numerous individuals in official and private capacities. The various contributions have been organised to provide specialised inputs into current debates and to assist governments, international bodies, UN agencies, as well as liberation movements, in the formulation of policy towards *apartheid* South Africa. The views expressed by individual authors do not necessarily reflect those of either the IUEF or organisations and individuals which have supported the project.

PREFACE

One of the most pressing matters concerning policy matters involved with decisions on economic sanctions *vis-a-vis* South Africa relates to the impact which the policy might have on the neighbouring economies of the region, both in the short and long term. In this report, the author reviews various options and scenarios and ascertains that the effects could be substantial. Not all, however, would be negative, since the thrust of sanctions would be to hasten an already specified policy, adopted by most states, of reducing economic dependence on the Republic.

Apart from assessing the impact of sanctions, considerable attention is given to various adjustment possibilities both on a regional and national basis as well as international support mechanisms and options which could in the end make sanctions a viable proposition. Even though the costs of sanctions are shown to be high in certain areas and for particular economies — the exercise is not sanguine on this score — it is also stressed that such a realistic assessment does not amount to any case against sanctions. Many of the affected countries are already disposed to support sanctions, their alternative at some point in the future being a form of forced participation in a major tragedy arising from a crisis in South Africa which promises to be potentially even more costly and damaging.

The careful arguments advanced, illustrating links between sanctions policies and the situation in neighbouring economies in respect to petroleum, finance, food, transport systems, employment, trade and independence from the Republic, provide considerable food for thought — for national governments which need to make contingency plans, for international support agencies, and all others concerned to see the elimination of *apartheid* in South Africa. The various interdependencies shown between national and regional solutions to possible future problems are spelt out in much detail. As the author concludes: "Economic Sanctions remain the only serious proposal on the international agenda which appears to have some potential for forcing South Africa into negotiations for systematic transformation".

1. INTRODUCTION

Evaluations of the impact of sanctions against the Republic of South Africa (RSA) on neighbouring Southern African states (Lesotho, Swaziland, Botswana, Mozambique, Angola, Zambia, Malawi, Tanzania, Zimbabwe, Namibia) can vary widely, indeed wildly.¹ At one extreme, some scenarios can be constructed showing total breakdown in trade systems and commercialised production with literal starvation suggested in some cases. At the other extreme, one could sketch the result of sanctions to include a rapid extrication from dependence on the RSA and attainment of a more self-reliant and regionally-linked development pattern.²

The divergence appears to stem from three causes:

- a) different scenarios cover different countries;
- b) different degrees of accuracy are used to evaluate the present economic links with RSA and, equally, how realistic as well as how costly are available and

- viable alternatives to them?;³
- c) different assumptions are made in respect of the potential pre-sanctions planning which could take place in Southern Africa, the degree of international support for the resulting adjustments, and the length and comprehensiveness implied by sanctions policies.⁴

1.1 Methodology

This survey is based on the following assumptions:

- a) the scope covers the Front Line States (Angola, Botswana, Mozambique, Tanzania, Zambia) and Lesotho, Malawi, Zimbabwe, Namibia and Swaziland.
- b) there will be limited pre-planning for adjustment to sanctions along the general lines of present attempts to reduce dependence on the RSA;⁵
- c) there would be coherent joint action by Front Line States, Swaziland and — if genuinely independent — Zimbabwe and Namibia to minimise the costs of sanctions, plus a limited international programme of assistance (with special reference to Lesotho);
- d) consideration is given to an alternative "scenario" if Zimbabwe and Namibia are not genuinely independent (or, if for one reason or another, the Zimbabwe transport system is not wholly functional).

The survey seeks, firstly to sketch the present elements and patterns of dependence and, secondly, to note recent trends in relation to the pattern of dependence. This is followed by a sketch of the initial (unadjusted) impact of sanctions on the various economies and a review of national/regional adjustment possibilities. Thereafter, notes are provided on possible international contributions to the adjustment problems which might arise and different patterns of exemptions (e.g. for Lesotho) or sanctions coverage (e.g. petroleum and/or finance sanctions only) are examined. The concluding section outlines a possible post-adjustment position in terms of the costs and the potential positive development impact implied for Southern Africa as well as the corollary, a damaging impact on the RSA economy from the application of sanctions by Southern African states.

The approach used is in principle politico-economic. It tends toward more narrow "economism" in practice because of limitations on available data about the socio-political costs of sanctions as well as the feasibilities entailed in major sacrifices or costs for certain economies. The past ability of Zambia, Tanzania, Angola and Mozambique to endure sacrifices (both in respect of Southern African liberation and other national goals or external shocks) without either economic or political collapse has been high, but each of these polities (in somewhat different ways) is today severely overstrained and may, in certain respects, be approaching either technical or political breakdown(s), although this, of course, varies in nature from case to case.

Further, it is not possible at this stage to integrate into the analysis a range of potential reactions emanating from the RSA. If the RSA chose to block key Southern African transport routes within the independent states (on a basis analogous to their behaviour over June/November 1979, following attacks by the Rhodesian armed forces on the Botswana, Zambia, Mozambique transport systems), the costs would exceed those posited in this report. In consequence, many of the adjustments suggested would be rendered impossible. Whether the Republic of South Africa would take such action depends on whether it believes that the raising of costs to Southern African states would result in the lifting of

sanctions against itself and, too, whether these counter-retaliatory measures would lead to any effective international response. On the face of it, such tactics from the Republic would not be likely to cause the removal of economic sanctions, if they had been agreed to and comprehensively applied by the world community. However, the lack of a military capacity to react by Front Line States, and of a demonstrated willingness to act by the international community in response either to Rhodesian raids (either in respect of liberation movement bases or on domestic Zambian, Mocambican, and Angolan communications) or to South African incursions into Angola and Zambia, is so glaring that the RSA might be persuaded to adopt such a "forward" military stance as one of its reactions to the imposition of economic sanctions. While it is difficult to see how the RSA could expect these actions to directly loosen sanctions, it is also hard to see what effective punitive action could *in fact* be mounted against the Republic from within Southern Africa. Therefore, if economic sanctions were actually crippling the RSA, it might conceivably strike out in such an aggressive and militaristic manner.

2. ELEMENTS OF PRESENT ECONOMIC DEPENDENCE IN THE REGION

The main areas of neighbouring state dependence on the Republic are in the following spheres: transport and communications, fuel and energy, food, employment, high level skills and personnel, finance, and general imports and exports. In each case, the current degree of dependence of different states varies sharply. Consider, briefly, each of these in turn.

a) *Transport and Communications*⁶

Lesotho is 100 per cent dependent on transport through the RSA. Botswana's transport, except by air, is almost equally dependent, unless and until the rail route via Bulawayo to Beira is again usable. Swaziland's transport is dominantly linked to the South African system for imports, but largely via Mozambique in respect of exports. Personnel, rolling stock and rail maintenance facility links, however, increase this degree of overall dependence. Zambia is currently significantly dependent on South African transport routes (as is Zaire) because of the physical destruction or crippling of its alternative rail and road routes connected to Mozambique and Tanzania and of the Angolan rail link. These five countries are now at present dependent on South African transportation routes.

The same has been true of Rhodesia and Namibia. On the other hand, for a genuinely independent Zimbabwe, the dependence on South African transport would be much lower. Before UDI, by contrast, South African routes were very much secondary to Mocambican. That situation can be restored by Zimbabwe, assuming that the major deferred maintenance and damage on the Beira line is made good. Botswana and Zambia could then become much less dependent on South African routes because of an alternative route via Zimbabwe to Mozambique. In principle, a genuinely independent Namibia would have very little transport dependence on South Africa. However the achievement of that result would require the creation of road and railway vehicle heavy maintenance capacity in Namibia rather than in the Cape Province, as currently prevails.

Mozambique's transport dependence on RSA is somewhat different. It is primarily a financial form of dependence, because transit traffic for Mozambique

is a leading source of foreign exchange. Admittedly, this is critical at present, but would certainly be less so under conditions of Zimbabwean independence and if Zimbabwean/Zambian traffic were again flowing through Mozambique.

b) *Fuel and Energy*⁷

The BLS countries remain totally dependent on petroleum products derived from the RSA. Only Swaziland at present has practicable transport access to a non-South African refinery. While Rhodesia and Namibia are also dependent on the RSA for petroleum products, an independent Zimbabwe would presumably reactivate its own refinery, and a genuinely independent Namibia would have the capacity to import directly.

In respect of electricity, Lesotho is totally dependent. Swaziland is significantly so, and Botswana continues to be marginally dependent on the RSA. Mozambique, on the other hand, exports power to the RSA from Tete (Cabora Bassa Dam) and reimports some of it because of current limits to its domestic transformer and grid systems. Namibia is dependent on the RSA for coal, used for smelting, and has no viable access (overland at least) to other Southern African collieries.

c) *Food*⁸

Lesotho and Swaziland, in some years Botswana and at present Zambia, are also heavily dependent on staple food (maize and to a lesser extent wheat, vegetable oils and dairy products) from the RSA. Mozambique, too, has derived substantial maize imports from the RSA in some post-independence years. In addition, Rhodesia may have become partially dependent on the Republic for grain, while Namibia remains very seriously dependent in respect of grains, sugar and vegetable oils. While a genuinely independent Zimbabwe would presumptively soon be self-sufficient in staple foods, a genuinely independent Namibia would in all probability remain dependent on staple food imports for several years, but even Namibia might be expected to seek alternative sources to the RSA, even in the absence of sanctions.

d) *Employment*⁹

About 86 per cent of Lesotho's, 50 per cent of Botswana's, 20 per cent of Swaziland's, perhaps 15 per cent of Malawi's and 15-20 per cent of Mozambique's wage employment is located in the RSA — half to two-thirds in mining sectors. The Lesotho case amounts to near total dependence on the South African labour market, since a small proportion of wage-labourers (one-seventh) located in Lesotho (as opposed to in the RSA) is found in directly productive sectors.

The areas of origin of Botswana and Mocambicans (and to some degree Malawians and Swazis) employed in the RSA are also concentrated by region. Thus, dependence on employment in the Republic is much higher for these areas, from which most of the workers come, than for these economies taken either as a whole or as a group. This point has some bearing on the impact effect which sanctions might precipitate.

e) *Skilled Personnel*¹⁰

Lesotho, Swaziland, Botswana (in directly productive sectors, but not government), Zambia (in mining), Malawi, Namibia and Rhodesia (in directly productive sectors, but not in government) are all in some measure dependent on South African high and technically specialised middle-level personnel. This dependence is particularly marked in respect to mining. While a genuinely

independent Zimbabwe and Namibia would — even in the absence of sanctions — seek to reduce dependence on South African personnel, they would most likely remain significantly dependent (especially in mining) for at least several years.

*f) Finance*¹¹

South African financial flows and banking institutions are dominant in the case of Lesotho and in more or less equal measure in Swaziland as well as Namibia and Rhodesia where RSA-based transnational banks dominate financial sectors. They are significant in respect to Botswana (for private and joint venture sectors only) and in Malawi. The finance available for imports from the RSA is also probably currently significant for Zambia and possibly also for Zaire.

Following genuine independence, it is likely that Zimbabwe and Namibia will become relatively rapidly de-linked from South African financial institutions and channels. In the case of Namibia, but not necessarily of Zimbabwe, the same could be expected in respect to investment flows.

*g) General Imports*¹²

Lesotho, Swaziland, Botswana, Namibia and possibly Rhodesia import dominantly from (as well as through) the RSA. In the first three cases, the dependence appears to exceed 90 per cent and in the fourth it may even be as high as 67-75 per cent. After genuine independence, Zimbabwe and Namibia would be likely to diversify import sources rapidly, even in the absence of sanctions.

Malawi secures about a quarter of its imports from the RSA as, at present, does Zambia. The share of South Africa's portion of Mocambican imports is relatively low.

*h) Export Markets*¹³

Lesotho's exports other than labour equal less than 10 per cent of imports. Moderate proportions of exports from Botswana, Swaziland and Malawi (other than labour) are sold to South Africa. Mozambique's exports to the RSA are basically power, transit services and labour — a significant proportion of its total foreign exchange earnings. About 10 per cent of Botswana's exports are used in the Republic. The share is much higher for meat products, but even there it is distinctly below export levels to EEC markets. Perhaps a sixth of Swaziland exports are destined for the Republic. Manufactured exports — notably fertiliser and television sets — are dominantly sent to the RSA as are timber products (largely mine props). Meat products are split between the RSA and EEC. Pulp, citrus, asbestos and sugar are not significantly dependent on South African markets. Of the new coal mines, one will be East Asian oriented and one European directed. Malawi exports some agricultural products — especially tea — to South Africa, but these account for little over 5 per cent of exports in most years.

Namibian exports to the RSA are dominant only in respect to cattle and — currently — fish products. A genuinely independent Namibia would be unlikely to maintain these patterns even in the absence of sanctions. What proportion of Rhodesian exports are actually to — rather than through — the RSA is unclear, but it would probably be a figure under 20 per cent. A genuinely independent Zimbabwe would be likely to sell a relatively low proportion of its exports to RSA even in the absence of sanctions.

3. RECENT ALTERATIONS IN DEPENDENCE PATTERNS ¹⁴

In respect of several Southern African states, there have been sharp changes in dependence patterns over the past few years. These have not all been in the same direction.

Since 1975, Angola has severed all links with South Africa. These connections were largely limited to external trade and were not dominant even there.

Mozambique has reduced its visible trade with South Africa as well as Mocambican employment in South Africa and has also virtually ended the use of South African personnel and finance. It has at times called on specialist South African personnel in transport and mine rescue operations, but the former have largely been phased out. Mozambique has now begun to evolve and implement alternative, regionally-oriented trade and transport patterns, including the opening up of routes to Zimbabwe. However, until these come to fruition and Zimbabwe is genuinely independent (and hence making full use of both Mocambican ports) South African transit traffic revenue will remain critical to Mozambique, possibly more so than it has been in the past.

Tanzania has provided major investment allocations (20-25 per cent of the total 1965-1974 Domestic Fixed Capital Formation) in alternative transport routes for Zambia and in building up an economic co-operation programme with Mozambique. (The severance of Tanzanie/RSA links in trade, air transport and employment came in 1961-1962 with internal self-government and independence.)

Malawi has somewhat reduced its employment dependence on the Republic of South Africa, with a 1974-1977 cut-off of formal RSA mine recruitment in Malawi. However, it has increased its trade and financial links.

Botswana has increased its trade and is at present increasing its transport dependence on the RSA. However, as these are in part shifts away from Rhodesia, they could be quickly reversed following genuine independence in Zimbabwe. Even so, Botswana's still small dependence on the RSA electric power may increase, given the cost and time-lag problems of expanding domestic capacity.

The withdrawal of Portuguese personnel from Mozambique forced curtailment in rolling stock and maintenance and personnel support for Swaziland railways, which (after an unsuccessful attempt to use non-regional personnel) turned to South Africa for interim replacements. While the railway is itself becoming more autonomous now, a new line links it more firmly to the South African system.

Lesotho's dependence has remained total. Its links increased quantitatively over the 1970s, with increased employment in South Africa supporting more private and public consumption in Lesotho. But, since 1975-1976, mine and probably total Basotho employment in the Republic has declined, a trend likely to continue, but not one reducing dependence in the absence of domestic alternatives.

Rhodesia has moved toward much greater dependence on South Africa in respect to trade, finance and transport. Some, but perhaps not all, of this shift could be fairly readily and rapidly reversed by a genuinely independent Zimbabwe.

The most striking development during 1977-1979 was Zambia's massive increase in dependency on the RSA. Part related to the economic crisis resulting

from the collapse of copper prices and the varied economic costs of applying sanctions and confronting the Rhodesian UDI. Part flowed from the limited and deteriorating capacity of the Zambian internal transport system and part was associated with the 1978-1979 drought and domestic grain availability crisis. However, most resulted from the systematic destruction of its non-South African transport links through Angola (1975 — by the South African backed UNITA), Tanzania (1979 — by Rhodesian armed forces), and Mozambique (1979 — by the Rhodesian military). This left Zambia with effective rail (or road) access to the outside world only through South Africa (via Rhodesia). While the road and rail links to Tanzania were restored to partial utilisation within weeks, the need to use the RSA routes is unlikely to be ended until after genuine independence in Zimbabwe.

Regional initiatives have been, in large part, oriented toward dependence reduction. The Southern African Development Co-ordination Conference (called by the Front Line States in Arusha, July 1979) centred on reduction of dependence on the RSA. Its first priority was transport. However, the articulation and implementation of its regional transport plan will necessarily require several years whilst, against this, the destruction of Zambia's external rail and road links to other Front Line States (and of Botswana's tenuous road ferry link to Zambia) made the second half of 1979 a period of rapidly increasing transport dependence on the Republic.

The United Nations Economic Commission for Africa (UNECA) has undertaken preliminary studies on transport and communications links. How relevant these are to meeting short-term needs, and how closely attuned to actual priorities some of them are (e.g. the Khartoum-Gaborone and Windhoek-Tripoli highways) to actual economic requirements or integration possibilities is much disputed within ECA and between some analysts and decision-takers. As a result, little action has resulted to date in the Southern African region, although some other proposals (e.g. the Mombasa-Lagos Trans-Africa highway) have been agreed, designed and brought to the implementation phase.

4. THE INITIAL IMPACT OF SANCTIONS ¹⁵

The following sketch of initial sanctions impact is made in terms of broad orders of magnitude. It estimates impact *before* national, regional or international adjustment measures are effective. It assumes:

- a) total sanctions against trade and financial transactions with the RSA;
- b) sanctions imposed in the early 1980s;
- c) Zimbabwe and Namibia genuinely independent, but still in the early stages of disengagement from the RSA;
- d) Zimbabwean and Angolan rail systems operational, but not fully rehabilitated;
- e) no South African military operation against the domestic or regional transport links of Southern African states.

The most affected state would clearly be *Lesotho*. If there were a total blockade, it would lack any alternative land transport links. Until 1982, it would also lack an airport capable of handling even moderate sized cargo planes. In addition, Lesotho would lack access to petroleum products and — except by violation of sanctions — it would be similarly placed in regard to sources of food required to meet its domestic deficit (increased by returning migrant workers) or

general import requirements. Because effective sanctions would, by definition, damage the South African economy, many or most Basotho employees in the Republic would probably be sent home. In that event, foreign exchange for imports and revenue for the government would be reduced by 50-75 per cent. There is one caveat which ought to be set against this picture of initial disintegration and potential starvation. South Africa might fear that this type of evolution in Lesotho would cause a social crisis spreading into Natal and the Orange Free State. Therefore, it might have an interest in maintaining some employment, food, petroleum and import supplies, but certainly not enough to avoid a very serious across-the-board crisis.

In the case of *Botswana*, severe problems would arise in respect to transport and petroleum supply. These would be of crisis proportions if no shift to the use of routes via, and to the procurement of petroleum supplies from or through, Zimbabwe had taken place prior to sanctions. Severe food problems — how immediately serious being dependent on grain reserves and whether any return to food purchases from Zimbabwe had taken place — would arise. Contraction in the employment of Botswana in the Republic would cause severe problems, especially in regions such as Ngamiland — a source of large numbers of migrants and limited numbers of home region jobs. Transitional problems would arise in respect to general import sources, but the main problem in respect to imports and to exports would be blockages in transport. Mining expansion would be hampered by a severance of financial links with the RSA and mining operations could be crippled, precipitated by the loss of South African personnel. The latter could be as serious as the loss of access to transport routes and to petroleum supply.

Swaziland could face an initial transport plus energy crisis in regard to petroleum and electricity supply. The former would depend on the degree to which the railroad had become self-sufficient in rolling stock and maintenance; the second would be related to the degree to which petroleum sources had been shifted from Durban to Maputo and additional hydro-electric capacity and/or a coal-fired electricity plant built to replace South African imports over the period *before* sanctions. Food supply (depending on reserves) and employment losses (depending on pre-sanctions expansion of domestic sectors in Swaziland and the loss of employment in the RSA) could have a modest to moderately severe initial impact. In respect of imports, transitional problems would arise. For exports, the losses would tend to be severe in respect of manufacturers (e.g. TV sets and fertiliser) but moderate to low for other major products. The financial problems would be transitional if Swaziland's external assets were then largely held outside the Republic. However, they could be more severe if assets were largely denominated in Rand. The potential loss of South African personnel could result in massive damage to almost all directly productive sectors — including sugar, citrus and livestock as well as mining, forestry and manufacturing.

The initial impact on *Zambia* is harder to project. In respect of transport, it will depend heavily on the degree of rehabilitation achieved before sanctions of the Zambian, Angolan, Zimbabwean and Mocambican rail systems. As of 1980, the loss of South African transport links would cause a crisis; two years after genuine independence in Zimbabwe and Namibia (if the latter paralleled a falling away of RSA support to UNITA, allowing a restoration of service on the Benguela railroad) the impact might be small. The food supply problem would depend on the state of initial pre-sanctions reserves, on whether Zimbabwe had

again become the main supplier of Zambian deficits, and on the continued availability and enhanced mobility of maize surpluses in Tanzania and Kenya. The other critical area would be that of mining personnel — notably possible losses of South Africans (especially if this follows an earlier exodus of white Rhodesians). Such events could cause a loss of output leading to a possible generalised economic crisis.

Mozambique would probably face a transport crisis but of rather a different kind to other economies. Maputo might be under-utilised following the blocking of South African transit traffic, while the port of Beira and the road and rail routes to it could well be swamped by additional traffic from Botswana, Zimbabwe and Zambia. The loss of Cabora Bassa power sales would probably affect the lenders to the project more than Mozambique because, to date, most South African payments go to repay construction loans which have never been accepted as obligations by Mozambique or any Mocambican company. However, until a national grid is complete, the Maputo (industrial) area would face severe electricity supply problems. Calls for new transport facilities and credit on transit traffic payments to assist landlocked economies would place a severe strain on Mozambique's external and domestic finances.

The initial sanctions impact on *Zimbabwe* would probably be severe. How severe would depend on the extent of reduction achieved in post-UDI links with RSA, the size of the RSA's investments in Zimbabwe, the degree to which the transport system had been rehabilitated, and on how much transit traffic from Botswana and Zambia moved through Zimbabwe prior to sanctions. If pre-sanctions changes are relatively large, severe transport problems (e.g. the loss of South African routes and increased transit demand) are likely; if they are small, a full-scale crisis in transport is possible. As with Zambia, Botswana and Swaziland, the loss of certain South African personnel could be damaging to the mining sector.

The impact of sanctions on a genuinely independent *Namibia* might be fairly small. That assessment assumes there would have been a long period of independence to have allowed substitution for South African transport maintenance facilities, the securement of control over Walvis Bay (or access to an alternative port by reconstruction, construction or transport routes to Southern Angola — a necessity even in the absence of sanctions), the reduction of dependence on the Republic for personnel and alternative coal and food sources. Sanctions immediately after independence could create a crisis (or worsen an existing one) through increasing the rate of departure of high- and middle-level personnel, exacerbating problems over the transfer of Walvis Bay and requiring very rapid transition policy and performance affecting food, coal and petroleum product sources.

Tanzania would be affected by support requirements — in respect to investment in transport and the need to provide formal or *de facto* credit on transport charges — for the directly affected states. Experience over 1965-1979 suggests that transport congestion and the financial costs would be serious. During that period, in excess of \$ 1,000 million was spent on Zambian-related transport project investment, equipment and maintenance; and up to \$ 80 million in arrears on transport charges and export payments had accrued. Further, the problems of clearing, forwarding and planning for Zambian cargo have proved acute for Tanzania (as they have for Mozambique and the RSA when Zambia has used their ports and rail roads).

The impact on *Angola* would be similar to that on Tanzania. The absolute

orders of magnitude might, however, be somewhat lower, but Angola's transport system has already been gravely damaged by the civil war and subsequent insurgency.

Malawi would face relatively secondary trade, finance and high-level personnel problems. To this should be added a rather severe employment loss with the repatriation of at least 20,000 miners and perhaps many other workers from the RSA.

However, if sanctions are imposed before the genuine independence of Zimbabwe and Namibia, some aspects of the initial impact on several Southern African states given above would be more severe. In this context, Rhodesia and Namibia would suffer severe problems or crises, but that would presumptively be part of the goals of sanctions, not strictly a cost. Indeed, South African intervention in Zimbabwe or continued refusal to agree to any plausible proposal for free and fair elections in Namibia might, in this scenario, be the likely "cause" of the sanctions. In this scenario, a number of points deserve mention at a country level.

Lesotho's situation would not be altered. *Botswana* would, however, face generalised crises because of the absence of any usable land transport route with the potential exception of the Kazungulu Ferry to Zambia, the usability and usefulness of which must be in grave doubt under conditions of continued war in both Rhodesia and Namibia. Botswana's access to petroleum and food supplies and its ability to ship exports would be near nil. *Swaziland's* position might be marginally worsened, but probably not much more than that. The question would turn on the continued functioning of the Mocambican transport sub-system, centred on Maputo. *Zambia* would face a generalised crisis. It would probably have very limited access to land transport because of continued damage to routes, this leading to an accentuated inability to export and a diminished access to vital food imports. The impact on *Mozambique* would be more severe. Both damage to transport routes and pressures to provide new links (e.g. highway or indirect rail) to serve Zambia would contribute to that outcome. Further, the loss of South African transit traffic revenue would not be offset by alternative traffic to any significant extent. *Tanzania* would face greater pressures to provide transit services, but probably less traffic would actually reach her border with Zambia. Thus, the costs of seeking to upgrade or expand capacity on present routes would be higher, but the strain on facilities might be lower. *Angola* would be more severely affected in this scenario. However, this results from an assumption about continuation of South African backed insurgency (blocking the Lobito Bay line) rather than of sanctions as such. The impact on *Malawi* would be unchanged.

5. REGIONAL AND NATIONAL ADJUSTMENTS TO SANCTIONS

This review of potential adjustments seeks to concentrate on steps possible within a maximum of eighteen months at costs either sustainable nationally or with conceivable levels of international support (see also section 6). It does not purport to outline a draft Five-Year Regional Development Plan (desirable, potentially practicable, but not squarely related to the situation pertaining immediately after the imposition of sanctions). Nor does it seek to consider what could be done were unlimited personnel, equipment, construction capacity, foreign exchange and finance available (an unreal scenario).

5.1 *Regional Aspects*

Any adjustment programme which is to be reasonably effective in reducing costs and overcoming barriers must have a significant regional component. This fact is underlined both by the partial successes and substantial failures of attempts to surmount the economic and physical impact of UDI and later Rhodesian sanctions on Zambia and Botswana. It is based on prevailing geopolitics as well as the existing (and medium-term future) patterns affecting transport, petroleum refining and the food balance found in the Southern African region. It is not predicated on any generalised ideal of regionalism nor any illusion that co-ordinated action is simple, conflict free or uniformly effective. The areas in which regional aspects are central include transport and communication, petroleum and food. In trade, regional co-ordination might also be of some significance.¹⁶

Transport

To be successful, transport adjustment would depend upon co-ordinated action to move the maximum feasible volume of traffic to, from and through the ports of Tanzania, Angola and Mozambique. "Maximum feasible" in this context implies rationing, i.e. quotas by route and country with each state deciding which existing imports and/or exports to continue and which to cut or reduce in order to fit available capacity. It also implies identifying those repairs, additions and link routes (feasible in the short to medium term) which could raise capacity and speed (as well as, if possible, lower unit costs). This might result from national or bilateral action in the spheres of construction, purchases and maintenance.

In two cases — Zambia and Zimbabwe — rehabilitation of domestic routes is the most critical priority. Without that, it would be impossible to support Zambia whatever efforts the coastal states make; and it would be equally impossible to re-route Zimbabwean access lines or ship Zambia's and Botswana's goods via Zimbabwe.

The main sub-areas to be considered within the transport sector include:

a) Ports:

Possible adjustments include more effective use of basic facilities and the upgrading of ancillary equipment and warehousing at Dar-es-Salaam, Beira, Maputo, Lobito Bay, possibly Mtwara and Tanga (the latter to free capacity at Dar-es-Salaam) and — in the event of access problems at Walvis Bay — Mocamedes and Puerto Alexandre. In the case of barriers to the use of Walvis Bay, recreation of the port of Swakopmund may be required.

b) Railways

Priority adjustments here cover rehabilitation of the Zambian and Zimbabwean main lines, the Lobito Bay line, the Tanzanian portion of Tazara and the Beira line; increases to rolling stock and traction power in Zambia, Swaziland, Mozambique, Angola, Botswana, (and to a lesser degree Tazara); a strengthening of management and maintenance capacities with special reference to Zambia, Zimbabwe, Angola, Namibia, Botswana, Swaziland; the planning and enforcement of a more rapid turnaround of rolling stock, both by avoiding surges of traffic and by draconian penalties for using wagons as warehouses. Possible short to medium term additions include potential linkages of the Zambian system via Malawi to northern Mozambique ports and (more

doubtfully- because of the time factor,) direct linkage of Zambia Railways to the Lobito Bay line, thereby bypassing Zaire.

c) *Highways and Road Haulage*

Possible capacity enhancing actions here might include the rehabilitation of existing arterial routes; the filling of gaps of 200 kilometres or less — e.g. with respect to the Zambia side of the arterial route to Beira and a heavy duty Katima Mulilo-Livingstone highway (if Walvis Bay access is a problem, certain south Angolan routes would also fall into the category); the upgrading of longer stretches of low-grade roads — e.g. Western Botswana to Windhoek — for the absorption of secondary flows; the restoration of and expansion in heavy duty lorry fleets and maintenance capacities probably on a route-by-route single company basis (with a basic company fleet and maintenance depots plus contract vehicles), analogous to Zambia-Tanzania Road Services which, despite its limitations, moved very substantial quantities of cargo relatively promptly and at much lower costs than the only actual alternative, *viz.* by air. However, with Zimbabwe and Namibia genuinely independent, road transport should be distinctly secondary to, and would probably feed into, the rail system.

d) *Air*

As a main transport mode, air is hopelessly high cost and also beyond the operational capacity of the states or region (even assuming they could procure sufficient equipment and crews). Experience in the late 1960s with the emergency oil lift to Zambia and with experiments at flying copper from Zambia to Dar-es-Salaam demonstrated both these limitations. However, no matter how well co-ordinated, any emergency transport network will have bottlenecks and delays. Therefore, as an essential backup measure to break bottlenecks (e.g. in the case of critical spare parts, pharmaceuticals or lubricants) an air freight capacity would be necessary. At this level — say a half dozen Hercules — the airport facilities exist and a contract formulated on a regional basis, with an air freight operator, should be feasible. The Lesotho case is, however, rather special — the equipment, logistics and cost requirements of a full-scale operation for this country would be such that it would be only possible to mount it internationally.

Co-ordination of the transport sector as a whole would optimally take the form of joint inter-state identification of needed flows, route capacities and bottlenecks. This would provide the basis for traffic allocations, physical maintenance, expansion programmes, construction commitments and the necessary institutional framework. Most actual operations would, in the end, be national in character, or possibly bilateral within the agreed frame. Procedures and communications in respect to documentation, the phasing of transport flows, the location of traction power, and so on, would potentially be as important as issues related to physical capacity and availability of personnel. The successive snarls experienced with previous Zambian shipments via Tanzania, Mozambique, Botswana and the Republic of South Africa bear witness in part to the regional implications of the deterioration of Zambia's domestic transport capacity, but also to the near total failure (despite serious efforts) to develop clear, expeditious and mutually agreed procedures for the communication of decisions and their implications. The issue here is not one of assigning "blame", but rather one of identifying a major constraint which, especially in the context of sanctions, could dis-locate both the regional transport network and the Zambian economy.

Petroleum

The refinery capacities of Maputo, Ndola, Luanda, Dar-es-Salaam and Umtali are probably adequate to meet regional needs, particularly if they are improved by secondary inflows of refined products to Namibia as well as movements to and through Angola, Mozambique and Tanzania. However, to verify this, and in order to identify workable crude and product import programmes, refinery use patterns and petroleum flows by country would need to be specified by a properly mounted technical co-ordination and planning exercise.

The measures required to be implemented, to serve needs where they exist, is largely a question of transport. With Namibia and Zimbabwe genuinely independent, this would appear manageable. Swaziland and Malawi could be served from Maputo, Namibia by imports from independent African or Middle Eastern refineries and Botswana from Umtali. Tanzania, Mozambique, Zambia, Angola and Zimbabwe could depend basically on their own refineries with supplementary imports channelled via ports in Mozambique, Angola and Tanzania. Only Lesotho would be cut off from supplies. To increase crude and product imports very rapidly would probably require ancillary contingency arrangements with OPEC or with several OPEC members, e.g. Nigeria, Algeria and Iraq. (See further discussions in section 6.)

The establishment of any new distribution pattern will require time to come into operation. Therefore, reserve stocks of 60-90 days in Botswana, Lesotho, Swaziland (and perhaps Malawi) plus some reserves located at refineries for interim dispatch would be needed prior to sanctions. In addition, with independence in Zimbabwe, recommissioning of the Umtali refinery and pipeline becomes a matter of urgency (but presumably this would be so independent of sanctions).

Food

A self-contained regional food security system is not at this stage really practicable.¹⁷ Botswana, Lesotho, Swaziland, Namibia have experienced large and growing food deficits. Mozambique and Angola have had, and still have, post-independence transitional deficits. To posit surpluses for these countries in the early 1980s would therefore be unwise. Zambia's record is totally erratic. While Tanzania now appears to have a normal maize surplus, its size is much conditioned by weather and is in any event perhaps 150,000 – 200,000 tons-a-year versus requirements of the order of 300,000 tons in normal and over 500,000 tons in drought years. A regional projection of basic food balances (maize, wheat, sugar, vegetable oil, sugar and milk) is required to identify probable import requirements and potential regional sources. Only in sugar is the overall balance positive, and sugar imports derived from outside the region are relatively simply acquired as compared to grains. However, some limited intra-state trade flows are possible and, where so, ought to be fed into the process of transport co-ordination.

Zimbabwean independence could, of course, alter the overall food balance picture. However, given the damage to the farming sector during the past few years, and the uncertainty surrounding rural transition, large surpluses in Zimbabwe are highly speculative.

An ongoing exchange of data on national reserve programmes and stocks (in one form or another in progress in a majority of states and deserving higher priority in most, even apart from sanctions) could provide a ground work for

emergency (drought or flood as well as sanctions) loan or sale transactions. This mechanism could provide a bridging period until the deficit state secured external supplies. There is some recent history of such bilateral actions of this sort, e.g. on an *ad hoc* basis between Tanzania/Zambia (in both directions) and Tanzania/Mozambique.

In order to be a bridge towards a new flow, not just the cause of a later gap (whether in the initial recipient state, the interim exporter or both), regional food security co-ordination needs to be linked to the global food security programmes and policies of the World Food Council and World Food Programme (see section 6).

Trade

Only limited regional adjustments in respect to import sources and export markets are practicable or can be envisaged in the short or medium term. For instance, Swaziland cannot redirect output of its TV sets, other electrical products and fertiliser from the RSA to Angola and Tanzania; Botswana cannot purchase mining machinery from Malawi instead of RSA. However, some potential market and source of supply alternatives do exist: e.g. some of Swaziland's electrical goods and fertiliser might be sold to Zambia and Zimbabwe. Zambia, Namibia and Zimbabwe may have the capacity to produce certain mining spares and chemicals needed by Botswana. Mocambican coal, shipped via Walvis Bay, might be a practicable replacement for South African coal in Namibia.

The requirements appear to be threefold: firstly a systematic inventory of key import requirements and export capacities; secondly, a clearing house to make these data widely known to state and/or non-RSA private trading corporations as well as governments and their purchasing agencies; thirdly, established bilateral contracts — probably in a state-to-state framework like the Mozambique/Tanzania annual trade agreements — executed by the trading companies. Like the other regional co-ordination proposals, this one is desirable, even in the absence of sanctions. However, like others, it would be more urgent and have different detailed priorities under conditions of sanctions being applied to South Africa.

5.2 Regional Mechanisms

If implemented, the Southern African Development Co-ordination Conference (SADCC) approach could provide a basis for the transport and food security aspects as well as probably for trade issues arising from sanctions.¹⁸ It would function on the basis of regional exchange of data, leading to adjustment and co-ordination of national actions, plus the development of project specific units and other joint activities. Presumably, it could fairly easily encompass petroleum supply problems as well. The question arising is how fast and how firmly the SADCC plans could move into operation and whether they would involve more than the mere core of designated Front Line States. The SADCC's approach would not *per se* focus on sanctions. Its perspective is the longer term reduction in dependence for development, but this approach could both reduce the cost of sanctions to the extent that programmes have already begun and it would create a framework suitable for adopting measures directed to achieving regional adjustments to sanctions. The Economic Commission for Africa has proposed a number of regional initiatives. A co-ordinated planning and policy programme

(MULPOC) has been established, based on its Lusaka sub-regional office. Similarly, a draft Preferential Trade Area — covering both tariff and non-tariff topics — has been negotiated by the Eastern and Southern African states.¹⁹ However, Angola, Mozambique and Tanzania still have major reservations about the Preferential Trade Area approach, while Botswana, Swaziland and Lesotho cannot, in fact, apply it unless and until they are able (or forced, e.g. by sanctions) to withdraw from the South African Customs Union (SACU).

5.3 National Economic Policy Adjustments

The outline of possible national actions given here is based on the assumption that regional co-ordination — including its components of national action — does, in fact, take place on the general model outlined above.

Lesotho, largely outside the scope of effective regional action, with very limited domestic capacities to adjust, facing the loss of most or much of its monetary Gross Domestic Product (wage earnings remitted from South Africa, statutory Customs Union payments, and receipts from South African tourism), has few independent possibilities for effective and total adjustment. Barring a massive international support programme (see section 6), Lesotho could not realistically be expected to participate in sanctions.

Botswana could reroute its transport flows via Zimbabwe (and perhaps peripherally through Zambia and Namibia). In that event, petroleum products could be secured from or through Maputo and food from or through Zimbabwe. This would allow most exports to flow and make possible the procurement of replacements for imports now secured from the RSA, subject — that is — to the creation of a Botswana-based (public, private or mixed) capacity. The replacement of South African finance could be negotiated (with a time lag). The most intractable short-term problems might be related to replacing South African personnel (especially in mining and transport) and road haulage vehicles. The time required for adjustment implies the need for at least 60-90 days of grain and fuel stocks at the time when sanctions are imposed. Massive unemployment resulting from returning migrant and contract workers now in South Africa could be tackled by intensified rural development, including wage jobs in seasonal or year-round infrastructural projects in the areas of origin. This would mitigate, but not overcome, the impact and would probably be possible only if programmes were well in hand on a stand-by basis prior to the imposition of sanctions.

Swaziland could shift its transport, petroleum products and food routing (not sources) away from the RSA to Maputo. Indeed, a *prima facie* case for beginning that process in respect to petroleum and transport exists, irrespective of sanctions. Its manufactured goods export problem, however, can at most be marginally alleviated by new regional markets. Yet, broader Indian Ocean or African prospects are problematic, *albeit* worth exploring. Procurement problems for imports and recruitment problems for personnel are likely to be more serious for Swaziland than Botswana, especially in respect of transport. Electricity supply could be maintained without rationing and cuts (at least 1/3 of total, 50 per cent of central grid deliveries as of 1980 and more each year thereafter) only if new hyrdo-electric and/or coal-fired capacity is completed by the time of sanctions or the establishment of a bilateral link to Mozambique (dependent here on linking Cabora Bassa to Maputo). A 60 - 90 day grain stock and similar length of oil pipeline before sanctions are also needed. A serious unemployment

problem from returned migrants and curtailed export sectors — on the order of 20,000 employees — could be alleviated by use of semi-skilled personnel to replace some South Africans and by an enhanced infrastructural programme. But these measures could hardly be expected to cope with the full impact and numbers involved.

Zambia's national requirements centre on effective organisation, maintenance and rehabilitation of domestic transport capacity, and on recruitment to replace South African personnel in mining. If these could be achieved, the external aspects of the transport, fuel, import-export and food sectors would begin to fall into place, assuming, that is, some success in regional co-ordination. The apparently limited nature of these requirements is misleading. Zambia is apparently very debilitated by fourteen years of coping with UDI (including the impact of ineffective global sanctions against Rhodesia, which arguably hurt Zambia somewhat more than they did Rhodesia) and by five years of collapsed copper prices over 1975-1979. Even maintenance of the present level of effort is proving a nearly unbearable strain. Genuine independence in Zimbabwe, if accompanied by continued moderate to buoyant copper prices, would provide consolidation and breathing space, thereby allowing for physical and perhaps economic rehabilitation. But how much this would help is not predictable, especially given the uncertainties as to future events in Zimbabwe or any date for sanctions imposition.

Mozambique is under even greater strain than Zambia physically, in terms of personnel requirements and economic needs. Its major domestic adjustment requirements would turn on mobilising local transport and refinery capacity and on rural development to cope with up to possibly 75,000 returning workers (available figures are not wholly reliable). If personnel, equipment and finance could be secured (this being largely an international support issue — as Mozambique has no national spare capacity), then the first two adjustments would appear feasible. The third turns on how fast the already initiated agricultural and broader rural development strategy for the Southern Provinces can be articulated and implemented both before and after sanctions.

Zimbabwe's adjustment needs are, in fact, basically those any genuinely independent state would pursue, but over a considerably compressed period of time. Again, they focus on domestic transport problems and skills recruitment (from returning Zimbabweans and others) needed to replace prospective departing South Africans and also white Rhodesians. The degree and pace of progress before sanctions would be critical to what might be achieved after, but is quite incalculable at present.

Namibia's situation is comparable to Zimbabwe's, but more self-contained in that Namibia is not a main alternative transit route for other landlocked states. (Unless one assumes a post-1986 date for sanctions, the Trans-Kalahari network would not be in service.) Namibia's problems might be marginally more manageable if Walvis Bay were settled and in Namibian hands. But if it is not — with or without sanctions — major, and at best expensive and uncertain, construction of a temporary port at Swakopmund will be required, together with new road links in southern Angola and either the construction of facilities at Puerto Alexandre or expansion of those at Mocamedes.

Tanzania, like Zambia and Mozambique, is in a state of extreme physical and economic fatigue from UDI, post-1974 new international economic disorder as well as from the Ugandan invasion, subsequent support for Ugandan liberation and flood damage in 1979. Its personnel and organisational capacities are greater

than many other states, but are at (or beyond) sustainable stress. Transport rehabilitation — the key Tanzanian input to any effective regional effort — is presently a national priority. How far it might proceed before (and how rapidly remaining gaps could be filled after) sanctions application would depend on the speed and nature of international co-operation *vis-a-vis* Tanzania's current crisis, and at least as much again on co-operation after the imposition of sanctions.

Angola is an additional case for which the most critical contribution to regional adjustment would be transport for Zambia, perhaps for Botswana via Zambia and for Zaire (a substantial portion of the trade of which now traverses Zambia and Rhodesia on its way to South African ports). Again, transport is a national goal, independent of sanctions. How far it could be attained would depend on external co-operation (partly in hand) and on a cessation of South African backed UNITA insurrection (which presumptively would be more feasible after genuine independence in Namibia). Reconstruction of the Lobito Bay line as a dependable, heavy duty route would probably require at least eighteen months' work in conditions not marked by recurrent sabotage.

Malawi's adjustment in respect to fuel, food and trade would appear to be within the capacity of a fairly routine state and company action if regional co-ordination on transport, petroleum and food was even moderately effective. The personnel recruitment adjustment would probably also be soluble through normal channels. The immediate employment of returning migrants would, however, not be possible. Moreover, present rural development strategies would probably not afford attractive opportunities for any substantial numbers.

5.4 Zimbabwe and Namibia: Special Considerations

In a scenario in which Zimbabwe and/or Namibia were not fully independent, far fewer and less effective adjustments would be possible. This would arise because of the following considerations: Zimbabwean routes to Mozambique would not be open to Zambia and Botswana; Botswana's exiguous land link to Zambia at Kazungulu Ferry would be at best risky and uncertain as a main route; Botswana's fuel needs could not be supplied from Umtali (nor given the Kazungulu problem would supplies from Ndola be safe or dependable); Angola would probably not have before it the prospect of rehabilitating the Lobito Bay line; Zambia would almost certainly not have been able to rehabilitate its domestic transport system; and the exhaustion of confronting non-independence in these states would be even greater in respect of Zambia, Mozambique, Angola and Tanzania than in the past.

The broad patterns of regional and national adjustment would, however, need to be the same, *viz.* excising the unavailable routes and the two dependent territories; However, the results would be systematically poorer, especially in respect to the ability of Tanzania and Mozambique to mobilise adequate transport capacity and the ability of Zambia and Botswana to maintain adequate access to the outside world. Specific projects would be needed to avert Botswana's virtual isolation (paralleling Lesotho's) and Zambia's transport problems which, if exacerbated, could trigger a general collapse of the economy and polity. In order to cope with these problems, the following proposals would need consideration: a massive international support for the rapid bolstering of Tazara, including maintenance workshops, rolling stock, traction power and engineering personnel; a parallel initiative in respect to the Lobito Bay line, plus an international deterrent to protect it (see section 6); a similar (*albeit* smaller)

exercise to create either a much larger ferry or pontoon bridge capacity at Kazungulu, plus an international deterrent force to protect it (again, see section 6); personnel, equipment, finance and construction capability to bring the whole of the Lusaka-Beira and Lusaka-Maputo road routes up to a heavy lorry standard and to keep them there, plus a fleet of at least 500 heavy duty lorries, and engineering staff, plus equipment for two main and two subsidiary maintenance depots; an air cargo capacity specifically oriented to Botswana's requirements and a larger general regional air freight fleet (perhaps a minimum of 12 Hercules shuttling from Maputo and/or Dar-es-Salaam to connect with sea cargo as well as an additional shuttle service from Ndola or Lusaka connecting with external air freight services).

The central alternatives here are in respect to transport. The other adjustments required or possible are modified only to the extent they depend on transport. However, for Botswana and Zambia, the transport (and consequential) differences would be colossal.

6. POTENTIAL INTERNATIONAL CONTRIBUTIONS TO SANCTIONS ADJUSTMENT

The automatic answer to what might be the international contribution to minimizing the potentially damaging impact from, and providing supportive positive adjustments after, sanctions is finance: but this is far too simple an answer.

Experience with the impact of sanctions against Rhodesia or Southern African states, and with the relative failure of international responses to requests by these states for assistance, suggests several things.

Firstly, *support* for states negatively affected by sanctions should be planned and implemented *parallel to sanctions enforcement*. Prompt damage limitation and prevention is likely to be more effective than a delayed assessment of and only partial compensation for losses already borne.

Secondly, broad financial damage assessments do not in themselves produce adequate pledges, let alone adequate financial transfers, to meet the need even in purely financial terms.

Thirdly, many *requirements are quite specific* and either cannot be met at all or *cannot be met effectively by financial transfers alone*. For example, in the absence of a workable transport and petroleum products supply programme, no amount of funding could sustain external trade and domestic economic activity. Finance to offset losses from mine closures forced by losses of South African personnel would be much less cost-effective and much less employment-supporting than the recruitment and supplying of replacement personnel.

At least eight areas for, or different types of, international co-operation to reduce the costs of sanctions and improve adjustments by Southern African states can be identified. These include: the special case of Lesotho, food, petroleum products, transport systems maintenance and rehabilitation, financial cost support (both recurrent and capital), interim procurement and marketing services, replacement personnel, and security for independent Southern African transport systems. Consider each in turn.

Lesotho

The impact of sanctions against the Republic of South Africa on Lesotho would be uniquely high and Lesotho's ability to adjust through national and regional measures similarly low. Therefore, a quite *special* international support package would be appropriate. One component could be an airlift (and, if needed, a military construction team to build at least interim heavy duty airfield facilities). A second could be in the field of finance for a mass employment programme specifically designed for Lesotho (e.g. reforestation, minor roads, water control works, village communal buildings and rural housing) so as to prevent the loss of jobs in South Africa leading to a total collapse of Basotho household incomes. A third could be the procurement and supply of critical goods and personnel to replace in part those previously secured from South Africa.

Food

Even in a normal year, South Africa exports substantial quantities of maize, wheat, vegetable oil, sugar and dairy products to other Southern African states. In drought years, the grain flow reaches the order of 500,000 tons. Even in the absence of transport and communications problems within the region, sudden attempts by the individual states to procure replacement supplies would face very real physical problems and would be likely to have a marked effect on world grain prices. The replacement of South African supplies requires basically grain and transport, not merely financial transfers. One is faced, therefore, with a world food security type of question, which can and should be addressed in the context of the World Food Council and World Food Programme. Speedy access to emergency reserves and to the means to move them are central to resolving this sort of problem. A parallel requirement — and one amply justified by weather-induced changes in annual output as well as by the need to create a breathing space to adjust to sanctions — would be assistance in the construction of a 60-90 day national reserve warehousing capacity and in the establishment of grain reserves in the independent Southern African countries. These — like longer-term regional production enhancement programmes — would have long-term, positive implications and would merit international support even in the absence of sanctions.

Petroleum Products

The issues involved in respect of petroleum products are analogous to those concerning food. Physical supplies delivered on time and not merely finance for purchases are crucial. True, imports from the RSA are negligible in world terms (under 500,000 tons, if Zimbabwe has by then reactivated its refinery and Namibia switched suppliers before sanctions). However, the "spot market" is both narrow (thus not necessarily able to provide extensive supplies) and highly volatile in price (exploding upward on real or believed increases in calis made upon it). Therefore, an OPEC (or even an individual oil exporting state) programme to provide prompt, alternative supplies and means to ship them (preferably at standard contract prices) would be needed. It would be given more time to come into effect if each of the BLS states assisted in pushing to completion its somewhat tentatively planned creation of 90-day domestic reserve stocks.

Transport

The strain on domestic and regional routes of coping with traffic diverted from the RSA system will undoubtedly be intense. The need to build or upgrade link roads will be urgent. (Major lines of transport, e.g. the Trans-Kalahari, cannot be seen as a form of short-term sanctions adjustment, since those activities take five to seven years to bring to completion even after the basic route, design and standards are known.) Again, the offer of finance to cover costs would not be a fully adequate response.

Trained personnel, to replace South Africans, to fill vacancies, to expand maintenance and construction capacity, and to train citizens would be a *sine qua non* for successful support. So, equally, will prompt provision of additional road vehicles, rolling stock, traction power, track and machinery, maintenance equipment, spares for rolling stock, and ancillary facilities. So long as these are serviceable and compatible with existing systems, they need not be new. Indeed, the need to start the flow within weeks of sanctions suggests the wisdom of an interim use of serviceable, second-hand equipment. Again, a purely market-oriented approach to procurement and recruitment would probably not work at least in the initial six months. Direct action by external co-operating states (especially those with state railways, highway haulage companies and engineering corps) would be needed. The effectiveness of support to post-sanctions adjustment would depend to a considerable extent on how far pre-sanctions period co-operation might have already contributed to the rehabilitation of the Zambian, Angolan, Mozambican and (after genuine independence) Zimbabwean road and rail transport systems.

Recruitment and Procurement

The replacement of South African personnel (especially in transport and mining) and the location of alternative sources for imports previously secured from the Republic are essential parts of any adjustment programme. Equally, they are activities which most Southern African states, public corporations or private firms will find difficult to nearly impossible without external co-operation. All of the latter group lack the systems and channels to switch recruitment or procurement rapidly and on a large scale. The most logical initial co-operating bodies would appear to be state procurement agencies, public corporations and recruitment and placement agencies or units. The range and volume of their activities — even in basically market economies like the USA or Federal Germany — is such that a properly organised programme could relatively easily cope with a substantial proportion of procurement and recruitment needs arising from Southern African states and units in their private sectors. Requirements in the private sector could be partly found through secondments.

Finance

The likely stress expected in areas *other* than finance proper should not imply that external co-operation inputs which would be needed in meeting the financial adjustment costs would not be essential. Immediate adjustment costs and the financing of emergency projects aimed at the reduction in dependence would be high — perhaps of a value of \$ 250 million annually for each item (\$ 500 million total) if the worst effects on the Southern African states and their peoples are to be substantially mitigated. That is a very rough figure, inclusive of

the costs for specific support programmes sketched above. Apart from costs incurred on these programmes supplying specific goods, services or personnel, support to offset recurrent costs would most appropriately be in block grants, certainly not in project-tied loans, with reimbursement in arrears. The latter format would cause a minimum 12-month delay in disbursement, thereby defeating the purpose of the exercise. Project support loans — preferably with expedited procedures for the stages of design, assessment, approval and disbursement — are appropriate for fixed investment programmes and projects designed to have a short- or medium-term impact on promoting regional or national alternatives to the use of South African goods or services. They are likely to be most effective if they can be made available to speed up implementation of projects designed, assessed and, perhaps even begun, prior to sanctions.

Transport Security

As recent experience in the region demonstrates, adjustment is virtually impossible to sustain in the face of the systematic destabilisation of transport routes and systems. The assurance of security from external pressures of this sort would thus be a logical part of external economic co-operation in support of the independent Southern African states.

The bulk of the damage to transport systems has been caused by *ad hoc* airborne operations. To ensure against their repetition in the event of sanctions against South Africa would require both an effective early warning (detection) system and an installed air defense (interceptor) capacity.

If these two components were present, they would probably not need to be used. The Republic would presumably not wish to clash with international forces capable of inflicting serious retaliatory damage on its military units and could hardly hope to secure removal of sanctions through confrontation with such units. However, to have this deterrent effect, the unit would need "teeth" — an "observer" or "interposition" force of the standard UN pattern would be unlikely to be effective. The equipment, personnel and cost requirements for such a unit need not be huge. As the posited purpose would be the defence of key internal transport facilities and the chances of actual combat would be low, such a transport security presence — e.g. through a UN operation — would be an appropriate part of external *economic* support for the independent states and peoples of Southern Africa in the context of sanctions.

Timing Considerations

International support for post-sanctions adjustment is unlikely to be very speedy or effective if it is not in some sense *planned prior to the imposition of sanctions*. On the other hand, an agreed international programme for mitigating the adverse impact of sanctions on Southern African states is unlikely to be negotiable so long as key states oppose sanctions.

Certain preliminary steps may be practicable now, for example:

- a) technical studies by voluntary bodies on the nature of possible national responses related to the character of needed international inputs: these could be carried out on a country and sectoral basis;
- b) the distribution of these studies to Southern African states, international agencies and other states for information purposes, comment, and evaluative criticism;

- c) the development of informal dialogue — especially at a technical level — among Southern African states, international agencies and other states to create a mutual awareness of likely technical problems, requirements, capacities and constraints;
- d) the formulation of quasi-official contingency plans at a national, sectoral and technical level, which could be used for determining initial programmes as soon as sanctions might be imposed;
- e) the consideration of the potential uses (and possible speed-up) of general dependence-reducing projects and programmes needed in the event of sanctions;
- f) support for programmes — e.g. Lobito Bay, Tazara, Mozambique Railways, Kazungulu Ferry rehabilitation, petroleum and grain storage capacity and stock expansion — needed for general economic development, but which would be particularly critical in the event of sanctions.

7. SANCTIONS EXEMPTIONS AND LIMITATIONS ON COVERAGE

The main analytical basis to this report has been based on the twin assumptions of total sanctions (covering exports, imports and finance) against South Africa which are applied by all states, including all those in Southern Africa. This section sketches the implications — for Southern African states — of certain exemptions or of less-inclusive sanctions coverage.

Lesotho Exempted

The exemption of Lesotho would not have a major impact on the general effectiveness of sanctions. However, assuming sanctions were effective, it would only marginally assist Lesotho.

If sanctions were effective, the resulting economic decline in the Republic would cause a massive employment decline for Basotho in the Republic and therefore an associated loss of purchasing power to Lesotho. Further, remaining Rand earnings would not be available for use to buy imports from outside the RSA.

Whether the RSA would permit sealed, inspected transit shipments of goods it was unwilling or unable to sell to Lesotho after sanctions (e.g. petroleum products) is doubtful. To the extent that Lesotho could pay, it could presumptively purchase food, some general manufactured goods and electricity from South Africa.

Broader Exemptions

If exemptions were broadened to include several states, loopholes would be opened. The present South African interest in the contract refining of crude purchased by or for Botswana, Lesotho and Swaziland appears to be at least in part an experiment with ways of increasing South African access to petroleum. Similarly, for South African transport routes to be permitted to be used by Zambia, Botswana, Swaziland would lead to almost insuperable policing

problems related to the prevention of South African imports and exports being disguised so as to slip in or out under the "transit traffic" umbrella.

An exemption in respect to food would, however, be practicable. South Africa would presumably be eager to continue selling food to Southern African states. Policing, on the other hand, would be relatively easy. However, as payment would be required in a form usable by South Africa, a small but not negligible loophole would be opened (unless one assumed a totally effective naval blockade).

An exemption related to the employment of migrant workers in South Africa would be of limited value. If sanctions were effective, South Africa would phase down their numbers rapidly. Further, unless linked to an exemption in respect to imports from South Africa, the remittance flow would be halted or rendered ineffective.

The employment of South African nationals would, in itself, pose few problems for sanctions enforcement. However, to allow remittances by them would create a small, but not insignificant, loophole.

Less Than Total Sanctions

Any number of partial sanctions packages could be hypothesized. The only one which would appear to have a substantial chance of success in forcing change by the Republic and be likely to be acceptable as well as enforceable in the absence of total sanctions would appear to be a combination of petroleum and financial sanctions.

The oil-plus-financial sanctions option would have distinctly lower costs for the independent Southern African states. However, the costs and adjustment requirements would remain substantial if this sanctions package had a substantial impact on the RSA.

Substantial transport facilities — at a first approximation, virtually all rail and port capacity, but little in the spheres of roads or airways — would remain available. So would most imports now secured from the Republic. South African personnel would also probably continue to be available. The petroleum supply problems would be unaltered. Financial flows from the RSA would tend to be negligible and employment in South Africa would be reduced sharply because of the economic impact of sanctions on the Republic.

A possible gain to the Southern African states from this alternative is that the RSA would probably be less inclined to seek the destabilisation of their economies or disruption of their internal transport systems. Because it would have an interest in maintaining trade and transport with them, the costs of these forms of intervention to the Republic would be higher than under a total sanctions scenario.

Whether petroleum and finance sanctions would be effective is nonetheless a more difficult question. Once Sasol III (coal-to-oil) is complete and molasses-based ethanol capacity significant, South Africa is likely to be far less dependent on imported petroleum, even if present "wet" gas/condensate "shows" come to nothing.²⁰ Moreover, if gold prices sustain their recently high levels, it is unclear whether South Africa would continue to need major international commercial bank credits. These issues are relevant to the present report only in the sense that long, drawn out, relatively ineffectual sanctions against the RSA would be likely to have a serious, medium-term, debilitating effect on neighbouring economies long before they "bit" in the Republic.

8. POTENTIAL ADJUSTED POSITIONS

In reviewing the potential adjusted position of different economies, it is assumed that national adjustment, regional co-ordination and international support have been roughly along the lines indicated in sections 5 and 7. It is also assumed that the measures have achieved moderate (but not total) effectiveness. It thus portrays a "best probable" scenario, not a prediction, a "most likely" or a "worst probable" outcome.

On the positive and development side, it is clear that the general lines of adjustment to sanctions amount to the *same* as for reorienting of development away from the present excessive dependence on the Republic of South Africa and toward greater national integration *and* regional co-ordination. In that sense, the response to sanctions would speed up a desirable set of actions and by forcibly increasing their priority the effect would be to increase national (and perhaps external) resource allocations to their attainment.

However, taken by itself, that is a Panglossian reading. Most investment needed for adjustment *would* be required over the next two decades even without sanctions. Reduction of dependence on a much larger, stronger neighbour is desirable, even if it does not have the special, undesirable characteristics of the RSA. Creative response to pressures *does*, however, focus attention in ways which may have positive long-term results. But the relative urgency, order and priority of individual programmes would be *different* in character under a phased-disengagement as opposed to a sanctions-adjustment scenario. Moreover, *the bunching of requirements* could create various almost insuperable obstacles (i.e. the constant danger of breakdowns) in some sectors and for some countries. Then, too, the *costs* of moving more rapidly both in terms of programmes undertaken and of those which must be postponed could be very high. Finally, many of the transitional costs (e.g. those in the transport sphere, until adequate facilities and institutions are made operational, those affecting unemployed returnees or marginalised migrants over an extended period, possibly production losses incurred before replacement personnel are recruited, import premiums and export discounts experienced before new and orderly trade sources and outlets are built up) are simply *not developmental* in nature, but are specific to a sanctions-adjustment scenario for disengagement.

It is also probably true to say that sanctions would force a change in development strategy which would be lasting and positive — assuming for this purpose that sanctions did not collapse, but remained in force for at least three years and ended with change in the Republic of South Africa. But that is an offset against their very real costs — not necessarily, in itself, an argument for using sanctions as a means to bring about changes in internal development strategy in and among the independent Southern African states.

Lesotho would face massive costs which no plausible level of external support could offset, notably in the loss of well over half of Basotho cash income. Support programmes could, however, help transform the rural sector (despite the fact that the record of crash employment schemes has not been alluring). But there is no way that *Lesotho* could become internally, economically integrated or acquire a normal trading principal other than South Africa. The development gains would, at best, help strengthen *Lesotho's* position vis-a-vis a "new" South Africa *after* sanctions and would do so at a high interim cost.

Botswana would face fairly low costs if Zimbabwe and Namibia were independent, the rail route to Beira were operational, and if the recruitment solutions implemented avoided serious production losses occasioned by the departure of South Africans. It could, however, suffer disastrous losses if none of these conditions were met. In the first case, development gains resulting through the greater impetus to co-ordinated activity involving Namibia (e.g. Trans-Kalahari, which could also integrate Botswana physically and economically) and Zimbabwe might actually outweigh costs. In the second, survival would be the only operative imperative and no co-ordination build-up with Namibia and Rhodesia would be possible.

Swaziland would probably face fairly moderate costs. However, it is unlikely that a medium-term adjustment programme would provide impetus for a coherent new development strategy with the problematic exceptions of food production and integrated water use planning.²¹

Zambia's additional costs might only be marginal if Namibia and Zimbabwe were genuinely independent. However, any additional costs would most likely weaken, not reorient, development in Zambia. If Zimbabwe and Namibia were not genuinely independent, the costs would be higher, the negative impact on development greater, and the risk of political-economic collapse very real.

Mozambique would face costs primarily from resource diversion needed to meet transport requirements and significantly greater unemployment in its southern provinces if and when migrants returned. These would also be costs related to the quicker implementation of objectives — refashioned transport links and the return of workers are already desired and planned, but over a longer time frame. The basic constraints here would be in the realm of organisational capacities and personnel shortages — constraints which would probably limit the possible development gains.

Zimbabwe and Namibia, if genuinely independent, would basically face a speeding up of an ongoing process as result of sanctions. In the early 1980's, they would presumably begin disengaging from South Africa at the maximum rate they perceived as prudent and/or possible. The short-term costs — in terms of breakdowns of key production and service units, institutions and sectors — of acceleration of these objectives might be very high. If major external support were available, it is arguable that these costs could be lowered and that the total cost of transition to a new development strategy would be lower on the abrupt than on the longer "prudent" trajectory.

Tanzania's costs would be analogous to Mozambique's. However, the country's greater personnel and institutional capacity might allow it a greater use of adjustment measures to further current national integration and regional co-ordination strategies.

Angola might experience rather limited costs from adjustment to sanctions. Lobito Bay line rehabilitation would, if feasible at all, have a high external component and be urgently needed even without sanctions. On the other hand, the need for domestic reconstruction after the 1961-74 war of liberation and the continuing civil hostilities would be so massive and pressing that there would probably not be enough resources to devote to the new development initiatives (national or regional) made possible in the context of general sanctions adjustments.

Malawi under present management, would face only modest generalised costs. Returning Malawian workers and their households, however, would face very severe costs. The externally oriented development strategy would be slowed

(with the "loss" of the RSA component), but it would probably not be altered. The real question here might be whether the differential impact of sanctions and the altered regional context would lead — in one way or another — to a "change in management" in Malawi.

Impact on South Africa

Sanctions imposition by the independent Southern African states would most likely not, by itself, be the dominant effect of sanctions on the Republic. The direct impact, however, would not be negligible. A fairly high percentage of non-gold exports go to other Southern African states. Sales of services (e.g. transport, insurance, finance and construction) plus remittances from them in the form of interest, profits, South African expatriates savings or home expenses form a rather larger share of South Africa's "invisible" earnings. Thus, sanctions by the regional states would certainly cause damage to the South African economy.

In any event, independent Southern African states could not (even if all wished to do so or an effective global sanctions programme excluding them were a credible option) avoid much of the impact of sanctions by refraining from imposing them themselves. The bulk of the initial impact and final cost would result from what sanctions in general might do to South Africa and the latter's probable attempts to adjust. This would be quite apart from direct reactions against what the independent Southern African states might do.

9. CONCLUSION

The specification of the initial impact, adjustment requirements and "final" cost burden implied by sanctions against the Republic of South Africa on and for the independent Southern African states is *not to oppose sanctions*. This is an important point to bear in mind. At least five of the states (presumptively seven on the genuine independence of Zimbabwe and Namibia) are themselves strong proponents of sanctions. This sketch — and more detailed follow-up studies which are needed — follow quite different logical imperatives. These are fundamentally twofold: firstly, the point that realistic *assessment* is needed to identify costs, problems and possibilities; and, secondly, an understanding of the parameters of the initial impact and potential adjustments is necessary to *plan ahead domestically*, to prepare for *co-ordinated action regionally* in order to mobilise *external support* for sanctions policies.

However, the sketch suggests a compelling case against any repetition of the Rhodesian sanctions experience. A combination of a largely ineffectual sanctions policy — applied by all or several Southern African states, but grossly evaded by many other states and by firms based in them — which might be late, limited and not underpinned with *adequate* international support for affected Southern African states is a scenario for *disaster*. The independent Southern African states and peoples in themselves are in no position to bear the cost of fifteen years of that type of confrontation with the Republic of South Africa. The exact parameters of disintegration, collapse and chaos cannot be sketched any more easily than the nature of the necessarily brutal survival strategies which might follow without sanctions. Nevertheless, it can be said that the general prospects of the latter, however vaguely illuminated, are potentially appalling.

It must also be noted at once that the absence of sanctions is no better solution. It would at most move the disaster a few years toward or just beyond 2000. A scenario of repression begetting violence in an ascending spiral within the Republic of South Africa would inevitably draw the independent Southern African states into a catastrophe. Support for liberation movements and raids against their bases and against the economic and transport infrastructure of their hosts would follow the bitter, bloody pattern of Rhodesia over the years 1965-1979. Given the greater internal resilience and external strike capacity of the Republic of South Africa, these prospects can again only be described as appalling.

A scenario of peacefully negotiated change within the Republic, would indeed be preferable. However, that is an argument for, not against, the imposition of sanctions. The South African regime has not responded thus far to pressures by proposing change. To date, there has not been adequate pressure for these changes to be more than marginal and intended to perpetuate, not transform, the system. Economic sanctions remain the only serious proposal on the international agenda which appears to have some potential for forcing South Africa and its internal and external supporters to enter into negotiations for systemic transformation.

NOTES

- 1 Most scenarios have not been elaborated fully. Indeed, the most interesting ones have arisen in conversations with leaders and intellectuals in the region and/or been fragmentarily expressed in editorials and other articles.

Relatively little exists in the way of either national or regional studies on the impact of sanctions against the Republic of South Africa on the independent Southern African states. But there are two relatively comprehensive sets of papers on the countries of the region, sectors looked at from a regional perspective and dependence on the Republic of South Africa. These are:

USAID, 1979: *Development Need and Opportunities for Co-operation in Southern Africa*, Washington. Main "Report to the Congress" plus annexes on nine of the countries (Tanzania is not within the region as defined by AID) and on major sectors (e.g. transport and communication, agriculture, mining, health, education and manpower).

SADCC, 1979: Southern African Development Co-ordination Conference, Arusha, July 1979.

- 1) Ten country papers.
- 2) Eight sectoral papers (steps toward economic integration; dependence and co-ordination; financial institutions and mechanisms; energy, water and mineral resources; agriculture, forestry and fisheries; employment and skills; transport and communications and trade).
- 3) Conference Speeches and Resolutions (mimeo) SADCC London Liaison Committee, Chairman, High Commissioner A.J. Nsekela, Tanzanian High Commission.


SADEX: The Southern African Development Information/Documentation Exchange publishes a bi-monthly bibliographic review and guide, Vol. 1, No. 2 (August/October 1979) of which see F.A. Komegay and V.A. Vockerodt: "Arusha and Regional Co-operation in Southern Africa: A Preliminary Analysis of Resources for Research and Study", SADEX, African Bibliographic Centre.

Some additional material, in particular on manpower and regional co-ordination, appears in the *IDS Bulletin* 1980-1983, Southern Africa, P. Selwyn (editor), Institute of Development Studies, University of Sussex, UK.

- 2 The case for rapid, phased extrication is in fact made in the 1979 USAID Report to Congress (AID 1979) and the Southern African Development Co-ordination Conference Speeches (SADCC, 1979 (3); IDA, 1980). However, it is usually made quite independent of sanctions and with a time perspective and set of priorities rather different from those which would be necessitated by adjustment to sanctions whilst dependence remains at present levels.
- 3 All of this work is relatively imprecise and speculative. The AID Report and SADCC country and sectoral papers (SADCC, 1979 (1), (2)) assemble the largest bodies of material though not in a sanctions adjustment context.
- 4 These factors are critical as discussed below — especially section 6.

- 5 See SADCC, 1979 (1), (2), (3) for data on present activities and proposed additions. See also AID, 1979.
- 6 Data largely derived from SADCC and USAID sectoral and country papers.
- 7 *Ibid.*
- 8 *Ibid.* but also discussions held by the author with officials in six of the countries over 1978-1979.
- 9 Data are highly imprecise because the RSA figures do not include — by definition — non-legal and illegal migrants and probably undercount seasonal and agricultural sector migrants. See SADCC, 1979 (1), (2), AID, 1979 for some data and reference to further sources.
- 10 Estimated from SADCC, 1979 (1), (2); AID, 1979; and C. Colclough in IDS 1980.
- 11 All data are fragmentary. These are little more than impressions, derived from looking at aggregated published data and talking to Treasury and Central Bank personnel in several of the countries.
- 12 Largely based on AID, 1979 and national trade statistics. The difficulties are that goods imported *through* South Africa are at times classed as *from* the RSA, especially in the BLS states, whilst goods *from* South Africa are sometimes entered as from less sensitive sources (often in ignorance of their true origin). Further, South Africa deliberately presents its exports to independent African states in an unintelligible form in its published data; and South Africa/SWA (Namibia) trade data are not published as such.
- 13 Derived from AID, SADCC and national trade statistics. These data are relatively reliable. Exports *through* South Africa are excluded.
- 14 Partly derived from SADCC, 1979 (1), (2); AID, 1979 and partly from discussions with officials and academics in the region.
- 15 This section is derived from country data, 1965-1979 experience with Rhodesian sanctions and, in some case, discussions with officials. Neither it nor the adjustment section purport to present official national calculations or contingency plans.
- 16 Based on SADCC sectoral papers on co-ordination and transport, and trade and AID sectoral papers on transport.
- 17 Food security on a regional basis received considerable attention at the 1979 SADCC Conference, Arusha, and — judging from statements — is of considerable interest to bilateral and multilateral aid agencies.
- 18 SADCC, 1979 (2), (3).
- 19 See ECA, 1979.
- 20 South Africa has indicated to at least two neighbouring states that it expects to have adequate domestic oil (from coal, sugar and/or petroleum) to export products refined from it before the end of the 1980s. While this may be disinformation, the "disclosures" were in the context of trade discussions and not diplomatic negotiations.

- 21 South Africa is approaching the limits of its domestic water supply and is encroaching on the flows needed by Swaziland and Mozambique from international rivers. Swaziland is seeking to negotiate a water rights agreement and to create a national, multipurpose water-use programme. This is seen as a priority quite apart from other aspects of, or alterations in, relations with the Republic.



Economic sanctions against South Africa

1. Policy Issues And Economic Sanctions On South Africa
D.G. Clarke
2. Sanctions As A Basic Choice In Southern Africa
A. Seidman
3. South Africa: The Impact Of Sanctions On Southern African Economies
R.H. Green
4. Assessing The Impact Of Economic Sanctions On Black Welfare In South Africa
L. Farina
5. Oil Sanctions: South Africa's Weak Link
M. Bailey
6. Financial Aspects Of Economic Sanctions On South Africa
S. Clarke
7. The International Impact And Adjustment To Economic Sanctions On South Africa
C. Elliot
8. International Institutions And Economic Sanctions On South Africa
J. Morrell
9. Trade Sanctions And Regional Impact In Southern Africa
R.J. Davies
10. Economic Sanctions And The South African Agricultural Sector
R. Riddell
11. The South African Manufacturing Sector And Economic Sanctions
M. Fransman
12. Sanctions And The Minerals Industries In South Africa
R. Murray
13. Migrant Labour To South Africa: A Sanctions Programme?
R. First and R.H. Davies
14. Economic Sanctions On South Africa: Past Evidence And Future Potential
D.G. Clarke